



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Ivan V. MENDENHALL  
Robert D. TAYLOR

Serial No.: 10/704,499

Filing Date: 07 November 2003

Title: BURN RATE ENHANCEMENT VIA  
METAL AMINOTETRAZOLE  
HYDROXIDES

Customer No.: 45483

Group No.: 1755

Examiner:  
Aileen Baker Felton

DECLARATION OF DR. GARY K. LUND

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

Declarant, Dr. Gary K. Lund, declares as follows:

1. I am one of the joint inventors of the subject matter described and claimed in U.S. Patent 5,742,647 to Blau et al.

2. I have a PhD degree in Inorganic  
Chemistry from the University of Georgia

I hereby certify that this correspondence (along with any paper referred to as being attached or enclosed) is being deposited with the United States Postal Service as First Class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on

29 September 2009

29 September 2009

Date

Kirk C. Blau

Signature

AAI-14306

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I/mem

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3. I have more than 27 years of work experience, as a research and development chemist

4. I am presently a staff scientist for Autoliv ASP, Inc., a corporation duly organized and existing under and by virtue of the laws of the State of Indiana and having a principal office and place of business at 3350 Airport Road, Ogden, Utah 84405.

5. I have read and reviewed U.S. Patent Application Serial No. 10/704,499 ("subject application") and the Office Action dated as mailed 31 March 2008 ("Office Action") relative to that patent application.

6. I have read and reviewed:

- a. cited and applied U.S. Patent 5,742,647 to Blau et al., including its specification and claims; and
- b. cited and applied U.S. Patent 6,143,102 to Mendenhall et al., including its specification and claims.

7. In the Office Action,

a. Claims 39-51 were rejected as being unpatentable over U.S. Patent 5,742,647 to Blau et al. The Office Action asserts:

Blau discloses slurry mixing of oxidizer such as copper hydroxide and fuel such as 5-aminotetrazole.

The Office Action further asserts:

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It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the claimed compounds present in the composition since they will form upon reaction of two compounds that are combined in a slurry and then added to the composition.

b. Claims 54-59, 61-66 and 69-71 were rejected as being unpatentable over U.S. Patent 5,742,647 to Blau et al. as applied to claims 39-51 and further in view of U.S. Patent 6,143,102 to Mendenhall et al.

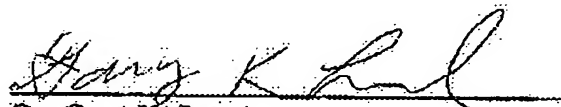
8. Based on my experience in both working with the chemical ingredients identified in U.S. Patent 5,742,647 to Blau et al. and the processing described in U.S. Patent 5,742,647 to Blau et al., including the processing described in the Example section of U.S. Patent 5,742,647 to Blau et al., the slurry mixing of oxidizer such as copper hydroxide and fuel such as 5-aminotetrazole, as set forth in the Office Action as disclosed in U.S. Patent 5,742,647 to Blau et al., does not result in the formation of metal aminotetrazole hydroxides, particularly copper aminotetrazole hydroxides, in accordance with the subject application.

#### CONCLUSION

9. Slurry mixing of oxidizer such as copper hydroxide and fuel such as 5-aminotetrazole as set forth in the Office Action as disclosed in U.S. Patent 5,742,647 to Blau et al., does not result in the formation of metal aminotetrazole hydroxides, particularly copper aminotetrazole hydroxides, in accordance with the subject patent application.

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10. All statements made herein of my knowledge are true; all statements made on information and belief are believed to be true; and I make these statements with the knowledge that willful false statements and the like are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

  
Dr. Gary K. Lund

Sept 22, 2008  
Date

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